FIG. 1

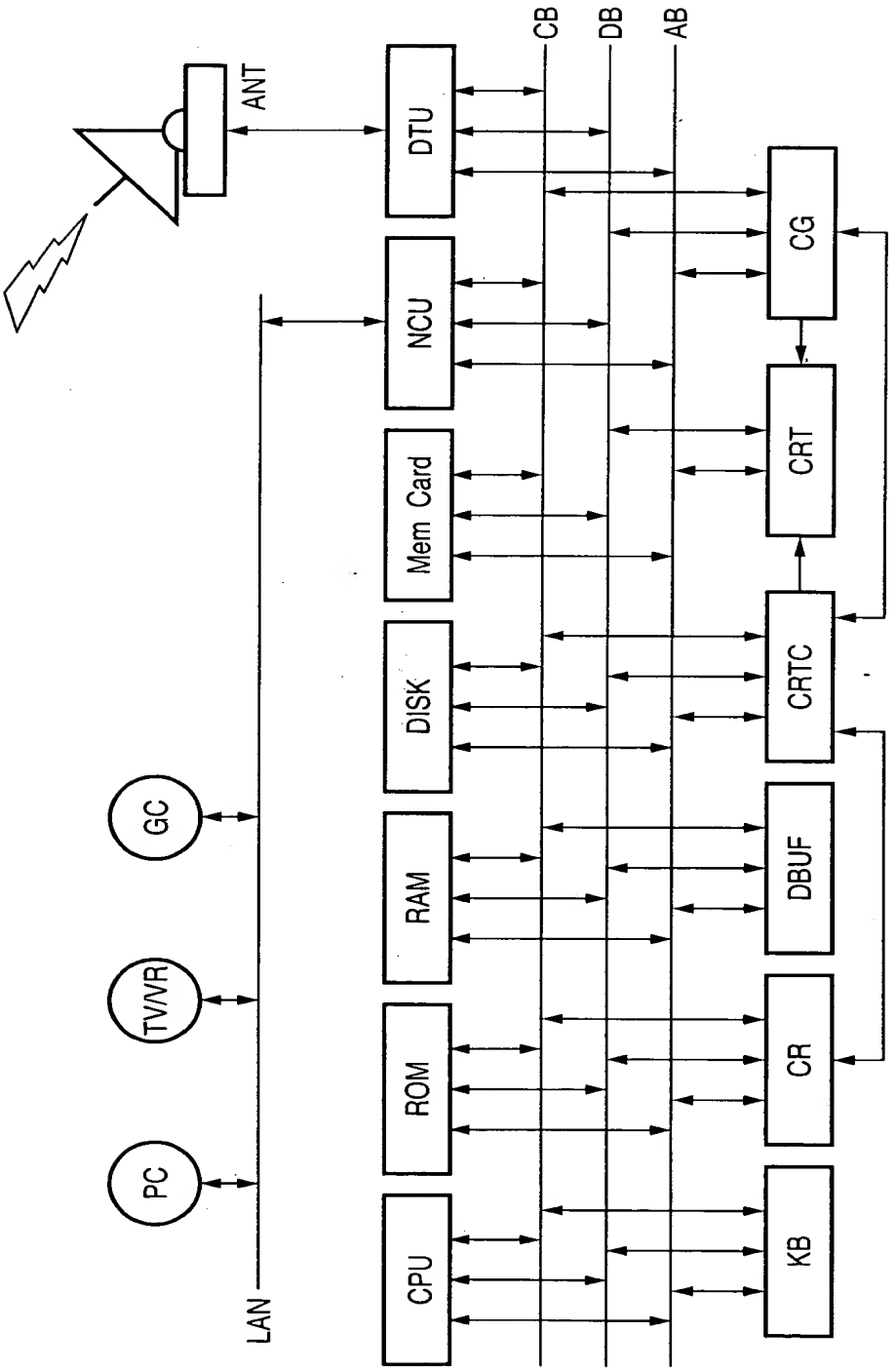

ANT
DTU
NCU
Mem Card
DISK
RAM
ROM
CPU
CB
DB
AB
CG
CRT
CRTC
DBUF
CR
KB
GC
TV/VR
PC
LAN

FIG. 2

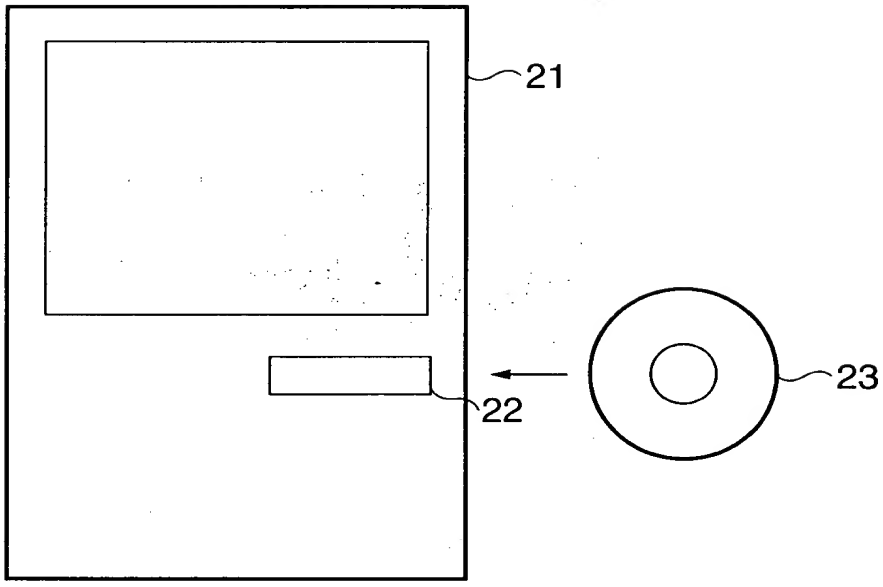


FIG. 3

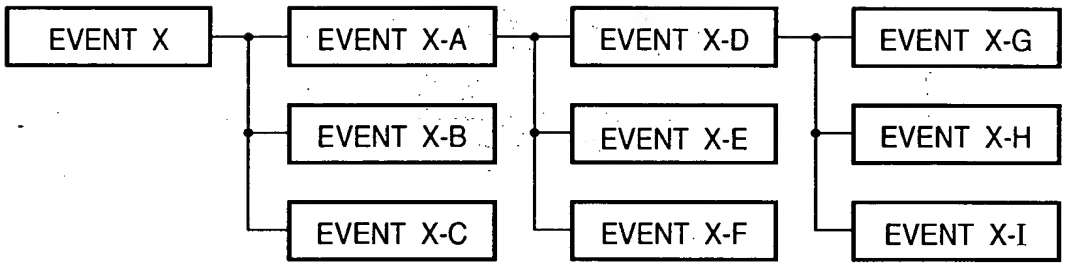

EVENT X
EVENT X-A
EVENT X-B
EVENT X-C
EVENT X-D
EVENT X-E
EVENT X-F
EVENT X-G
EVENT X-H
EVENT X-I

FIG. 4

TYPE OF EVENT	META DATA CANDIDATE
WEDDING RECEPTION	BRIDEGROOM, BRIDE
•	•
ENTRANCE OF BRIDAL COUPLE	BRIDEGROOM, BRIDE, SPOTLIGHT
SPEECH	GUESTS, FRIENDS, APPLAUSE, LAUGH
ENTERTAINMENT	VIDEO, FRIENDS, LAUGH
•	•
•	•
EXCURSION	CHILDREN, TEACHER
•	•

FIG. 5

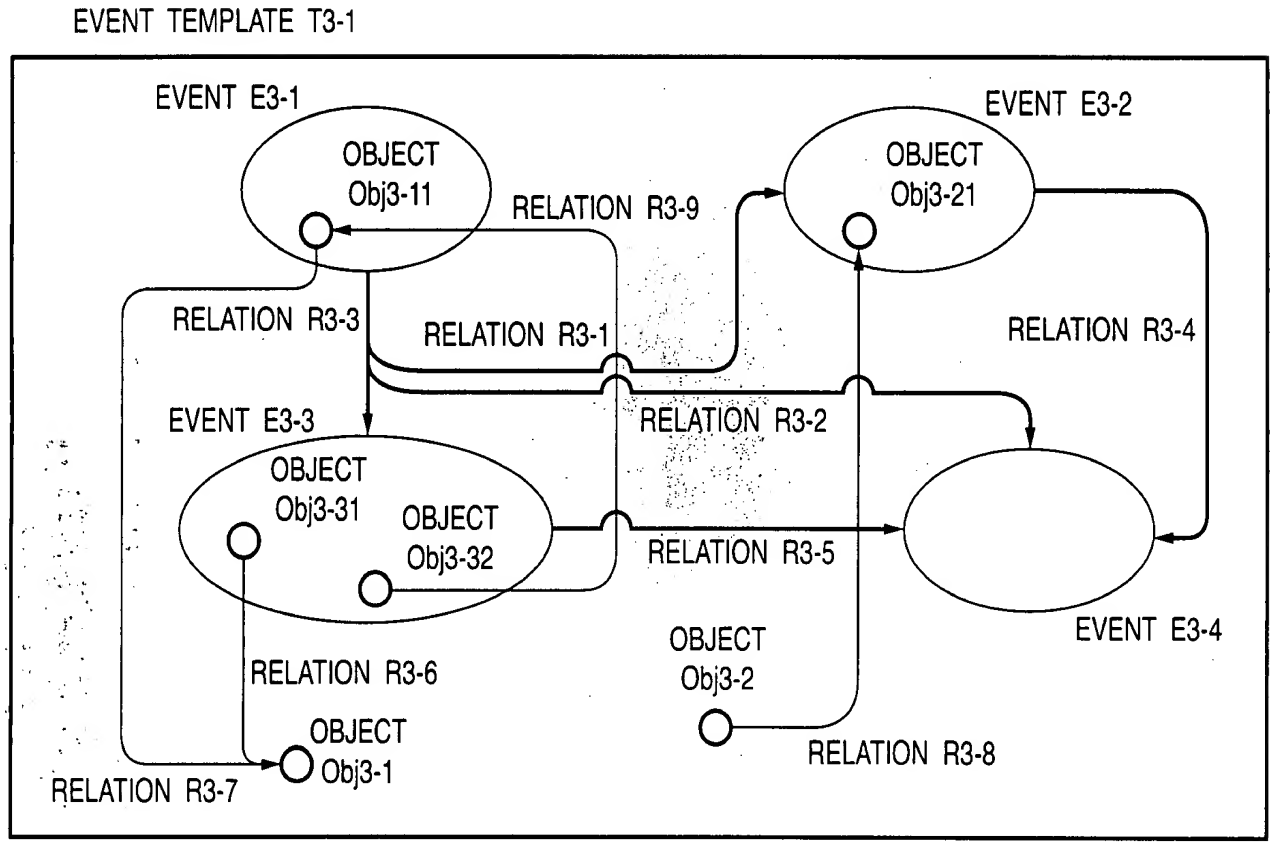

EVENT TEMPLATE T3-1
EVENT E3-1
OBJECT
Obj3-11
EVENT E3-2
OBJECT
Obj3-21
RELATION R3-9
RELATION R3-3
RELATION R3-1
RELATION R3-4
EVENT E3-3
RELATION R3-2
OBJECT
Obj3-31
OBJECT
Obj3-32
RELATION R3-5
EVENT E3-4
OBJECT
Obj3-2
RELATION R3-6
OBJECT
Obj3-1
RELATION R3-7
RELATION R3-8

FIG. 6

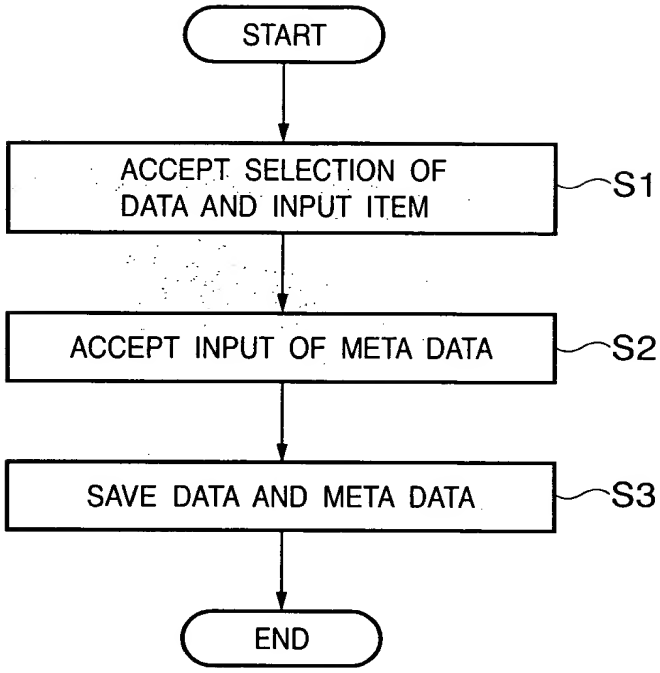

START
ACCEPT SELECTION OF DATA AND INPUT ITEM
S1
ACCEPT INPUT OF META DATA
S2
SAVE DATA AND META DATA
S3
END

FIG. 7

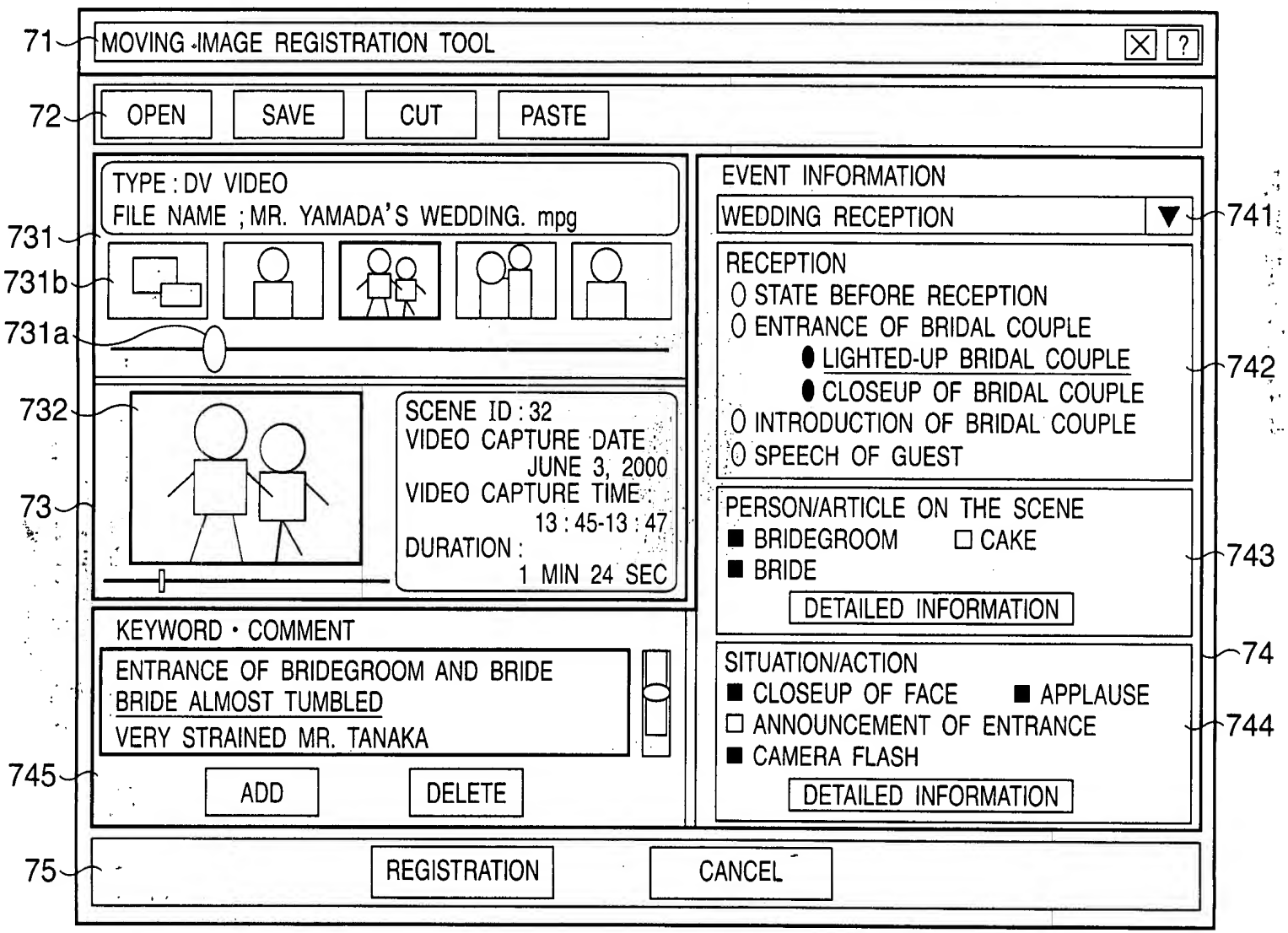

71
MOVING IMAGE REGISTRATION TOOL
72
OPEN
SAVE
CUT
PASTE
TYPE : DV VIDEO
FILE NAME ; MR. YAMADA'S WEDDING. mpg
731
731b
731a
732
73
SCENE ID : 32
VIDEO CAPTURE DATE : JUNE 3, 2000
VIDEO CAPTURE TIME : 13 : 45-13 : 47
DURATION : 1 MIN 24 SEC
KEYWORD • COMMENT
ENTRANCE OF BRIDEGROOM AND BRIDE
BRIDE ALMOST TUMBLED
VERY STRAINED MR. TANAKA
745
ADD
DELETE
EVENT INFORMATION
WEDDING RECEPTION
741
RECEPTION
STATE BEFORE RECEPTION
ENTRANCE OF BRIDAL COUPLE
LIGHTED-UP BRIDAL COUPLE
CLOSEUP OF BRIDAL COUPLE
INTRODUCTION OF BRIDAL COUPLE
SPEECH OF GUEST
742
PERSON/ARTICLE ON THE SCENE
BRIDEGROOM
CAKE
BRIDE
DETAILED INFORMATION
743
74
SITUATION/ACTION
CLOSEUP OF FACE
APPLAUSE
ANNOUNCEMENT OF ENTRANCE
CAMERA FLASH
744
DETAILED INFORMATION
75
REGISTRATION
CANCEL

FIG. 8

MOVING IMAGE DATA A	META DATA			
	EVENT TYPE	PERSON/ARTICLE ON THE SCENE	SITUATION/ACTION	KEYWORD, ETC.
FRAMES BA TO FX	RECEPTION-ENTRANCE	BRIDEGROOM, BRIDE	APPLAUSE, ILLUMINATION	STRAINED BRIDEGROOM
FRAMES GB TO JD	RECEPTION-GUEST SPEECH	BRIDEGROOM'S GUEST	CLOSEUP OF FACE	CAREER OF BRIDEGROOM
FRAMES MA TO LM	RECEPTION-ENTERTAINMENT	FRIENDS, VIDEO	LAUGH	HISTORY OF BRIDE
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.

FUS260: 22nT9666

FIG. 9

META DATA	DATA
BRIDEGROOM	DATA X: FRAMES XX TO YY: FRAMES AA TO BB • • •
BRIDE	DATA X: FRAMES XX TO YY: FRAMES AA TO BB • • •
WEDDING RECEPTION	DATA X, DATA Y • • •
•	•
•	•
•	•

9/20

FIG. 10

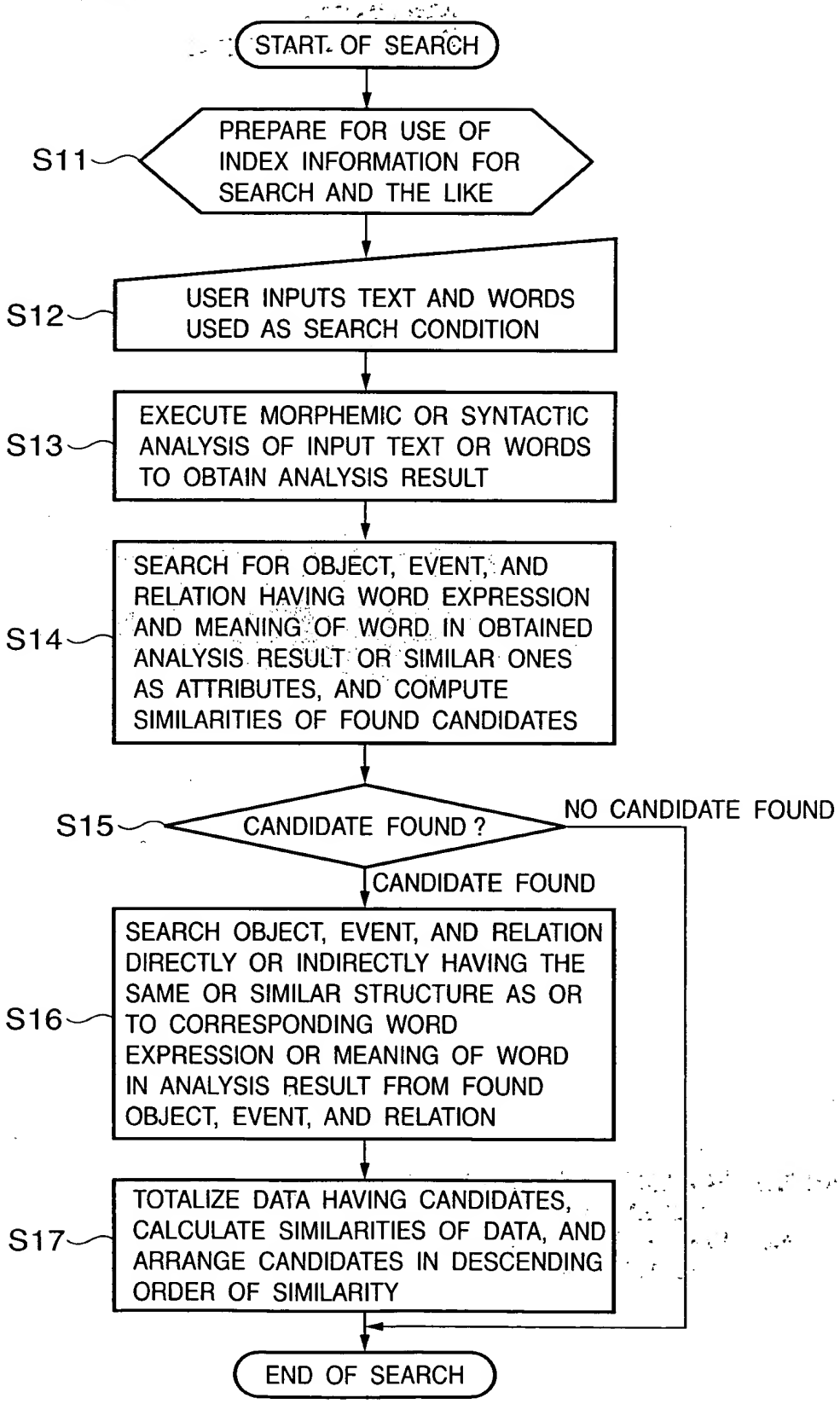
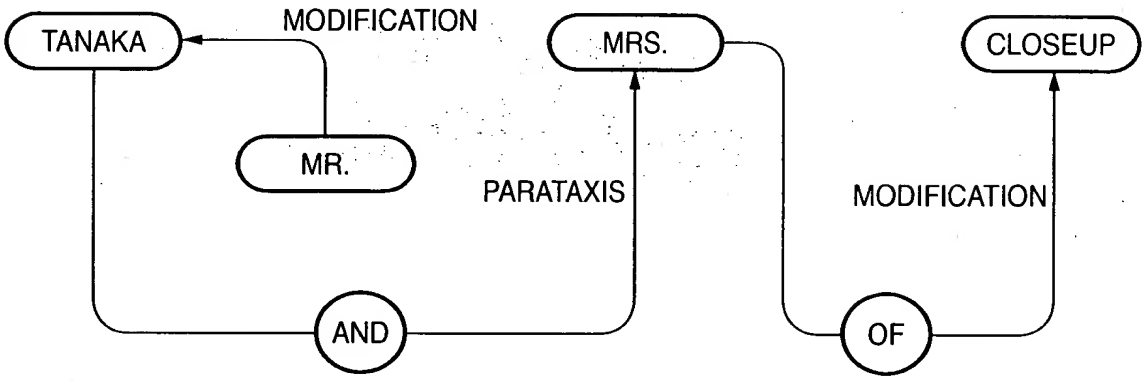

START OF SEARCH
S11
PREPARE FOR USE OF INDEX INFORMATION FOR SEARCH AND THE LIKE
S12
USER INPUTS TEXT AND WORDS USED AS SEARCH CONDITION
S13
EXECUTE MORPHEMIC OR SYNTACTIC ANALYSIS OF INPUT TEXT OR WORDS TO OBTAIN ANALYSIS RESULT
S14
SEARCH FOR OBJECT, EVENT, AND RELATION HAVING WORD EXPRESSION AND MEANING OF WORD IN OBTAINED ANALYSIS RESULT OR SIMILAR ONES AS ATTRIBUTES, AND COMPUTE SIMILARITIES OF FOUND CANDIDATES
S15
CANDIDATE FOUND ?
NO CANDIDATE FOUND
CANDIDATE FOUND
S16
SEARCH OBJECT, EVENT, AND RELATION DIRECTLY OR INDIRECTLY HAVING THE SAME OR SIMILAR STRUCTURE AS OR TO CORRESPONDING WORD EXPRESSION OR MEANING OF WORD IN ANALYSIS RESULT FROM FOUND OBJECT, EVENT, AND RELATION
S17
TOTALIZE DATA HAVING CANDIDATES, CALCULATE SIMILARITIES OF DATA, AND ARRANGE CANDIDATES IN DESCENDING ORDER OF SIMILARITY
END OF SEARCH

FIG. 11

ANALYSIS RESULT OF "CLOSEUP OF MR. & MRS. TANAKA"



FD5260-E2hF3660

FIG. 12

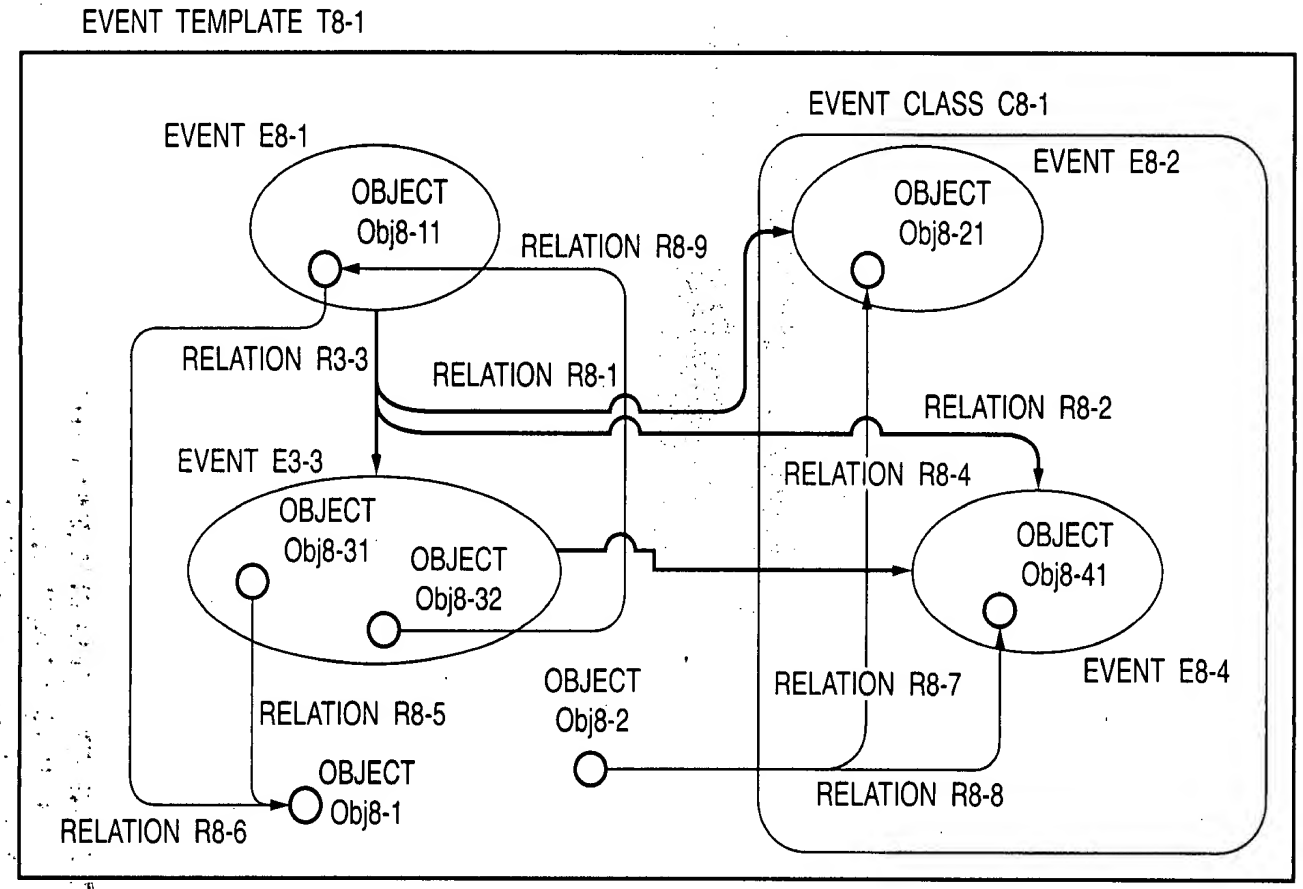


FIG. 13

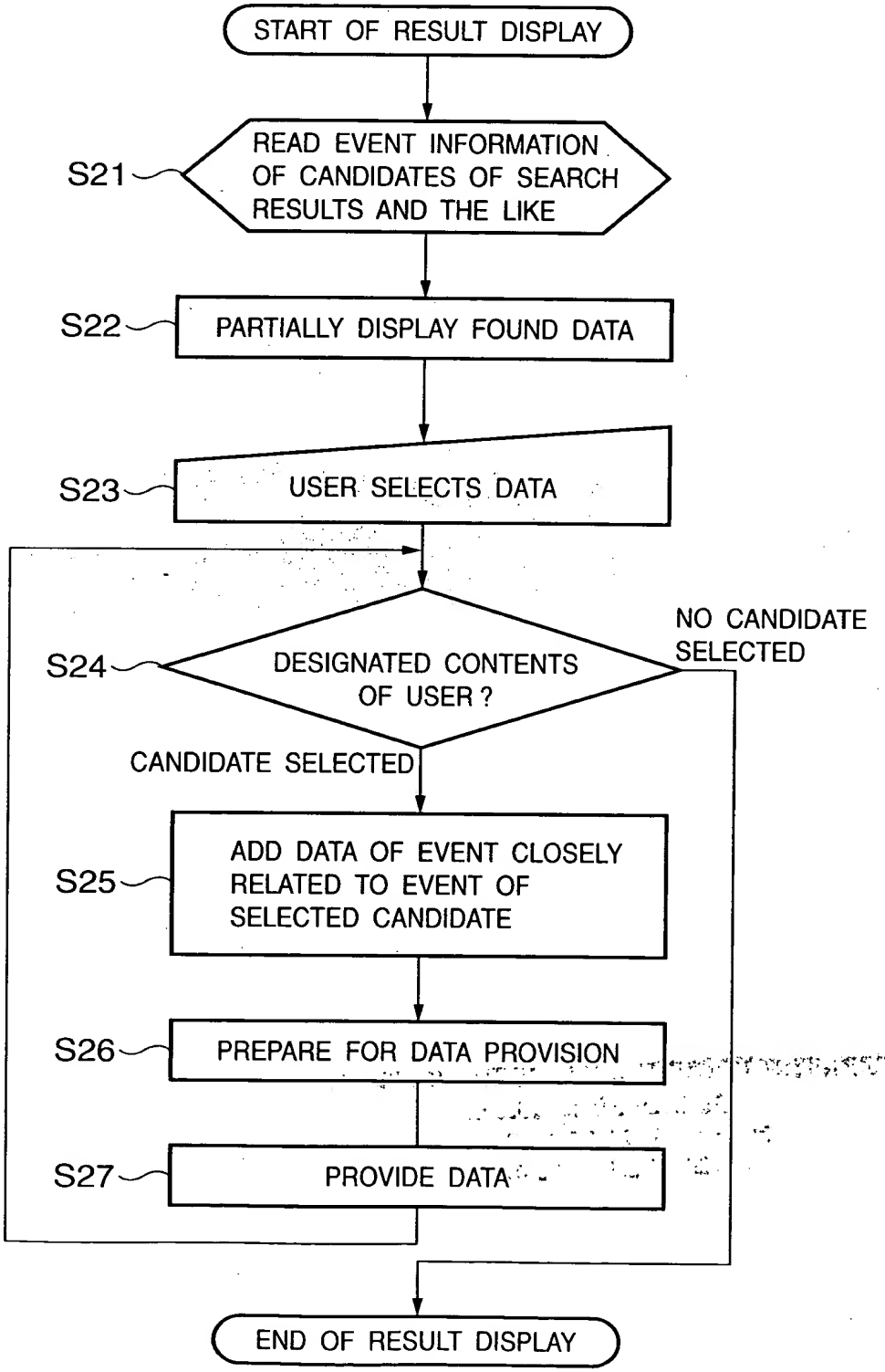

START OF RESULT DISPLAY
S21
READ EVENT INFORMATION OF CANDIDATES OF SEARCH RESULTS AND THE LIKE
S22
PARTIALLY DISPLAY FOUND DATA
S23
USER SELECTS DATA
S24
DESIGNATED CONTENTS OF USER ?
NO CANDIDATE SELECTED
CANDIDATE SELECTED
S25
ADD DATA OF EVENT CLOSELY RELATED TO EVENT OF SELECTED CANDIDATE
S26
PREPARE FOR DATA PROVISION
S27
PROVIDE DATA
END OF RESULT DISPLAY

FIG. 14

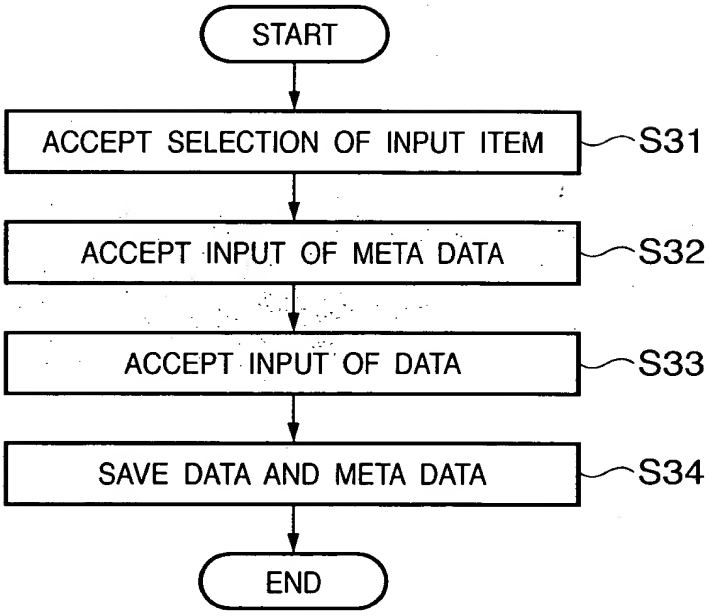

START
ACCEPT SELECTION OF INPUT ITEM
S31
ACCEPT INPUT OF META DATA
S32
ACCEPT INPUT OF DATA
S33
SAVE DATA AND META DATA
S34
END

FIG. 15

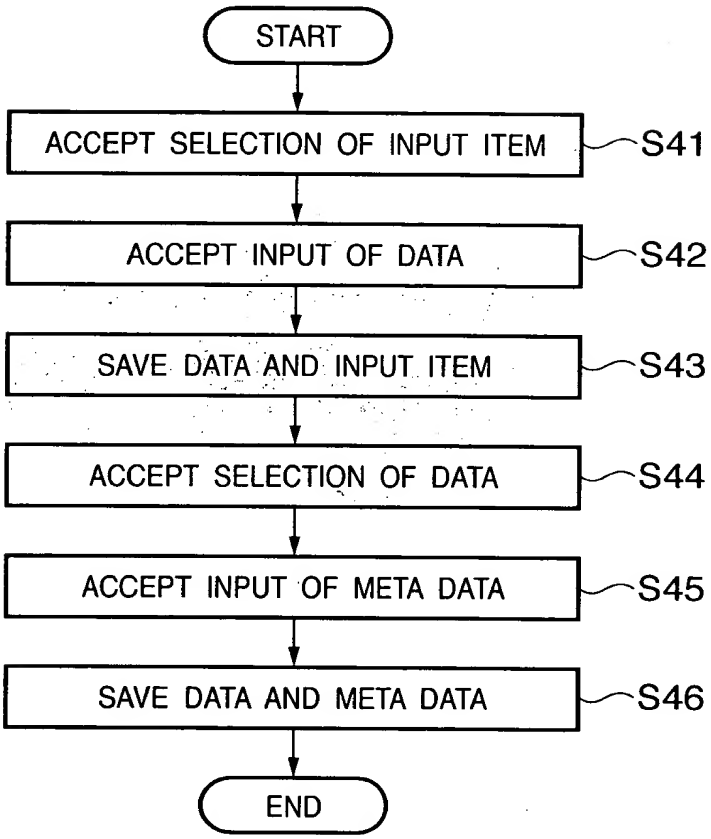

START
ACCEPT SELECTION OF INPUT ITEM
S41
ACCEPT INPUT OF DATA
S42
SAVE DATA AND INPUT ITEM
S43
ACCEPT SELECTION OF DATA
S44
ACCEPT INPUT OF META DATA
S45
SAVE DATA AND META DATA
S46
END

FIG. 16

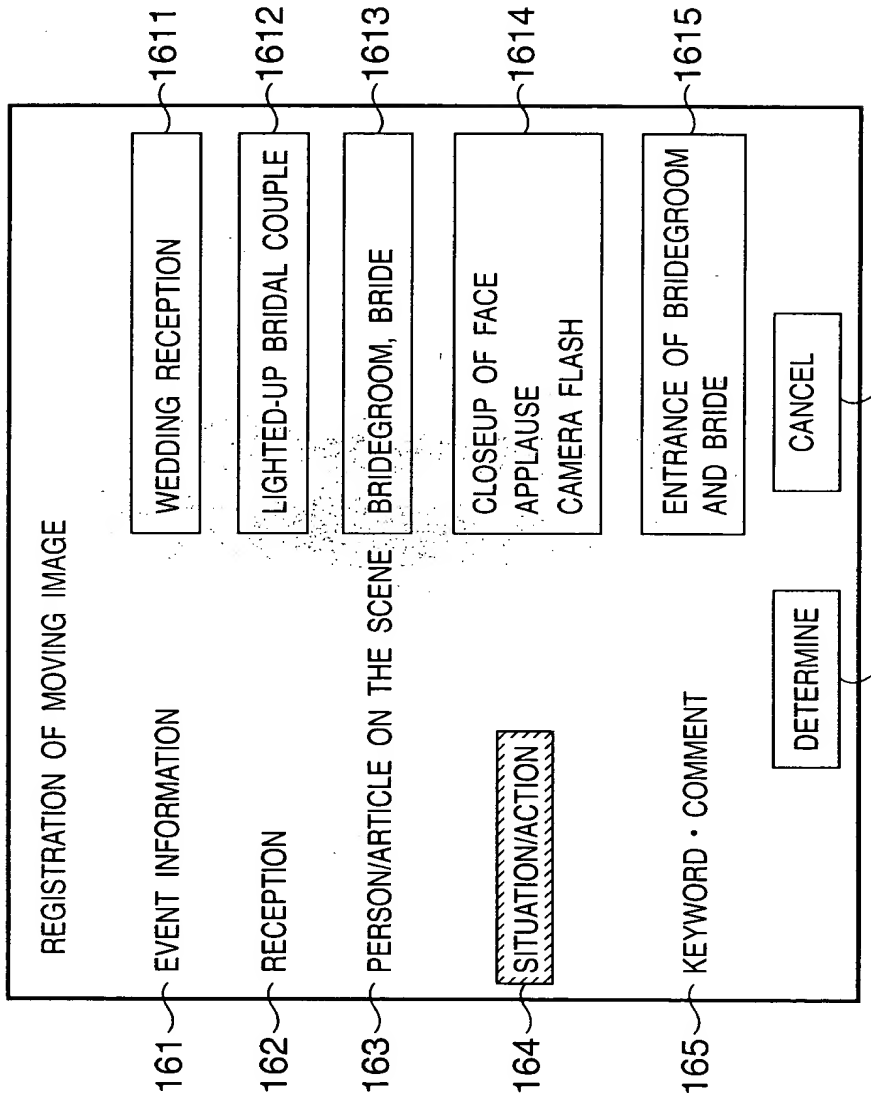

REGISTRATION OF MOVING IMAGE
EVENT INFORMATION
RECEPTION
PERSON/ARTICLE ON THE SCENE
SITUATION/ACTION
KEYWORD・COMMENT
DETERMINE
CANCEL
WEDDING RECEPTION
LIGHTED-UP BRIDAL COUPLE
BRIDEGROOM, BRIDE
CLOSEUP OF FACE
APPLAUSE
CAMERA FLASH
ENTRANCE OF BRIDEGROOM AND BRIDE
161
162
163
164
165
166
167
1611
1612
1613
1614
1615

FIG. 17

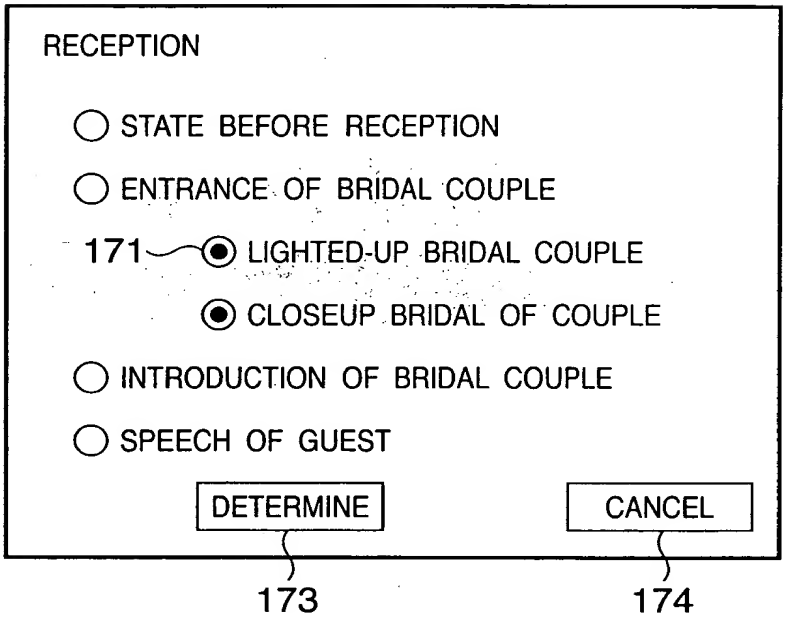

RECEPTION
STATE BEFORE RECEPTION
ENTRANCE OF BRIDAL COUPLE
171
LIGHTED-UP BRIDAL COUPLE
CLOSEUP BRIDAL OF COUPLE
INTRODUCTION OF BRIDAL COUPLE
SPEECH OF GUEST
DETERMINE
CANCEL
173
174

FIG. 18

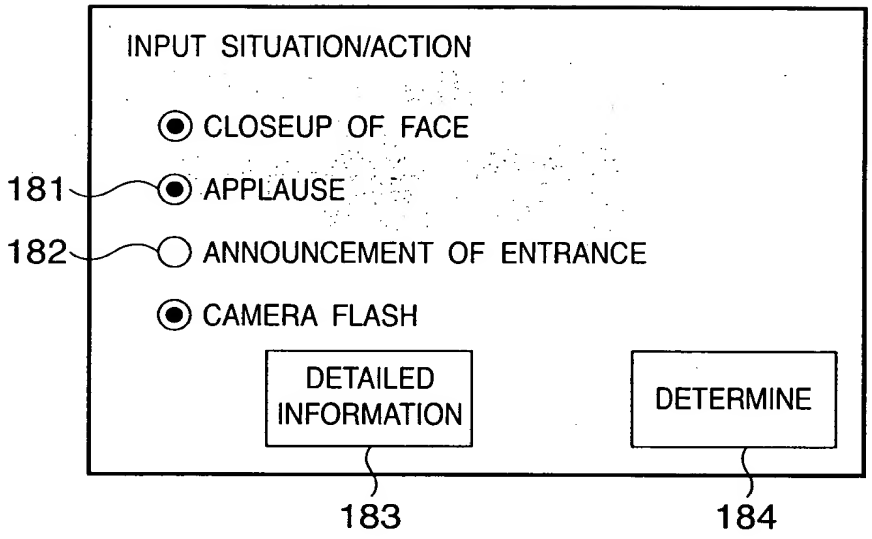

INPUT SITUATION/ACTION
CLOSEUP OF FACE
181
APPLAUSE
182
ANNOUNCEMENT OF ENTRANCE
CAMERA FLASH
DETAILED INFORMATION
DETERMINE
183
184

FIG. 19

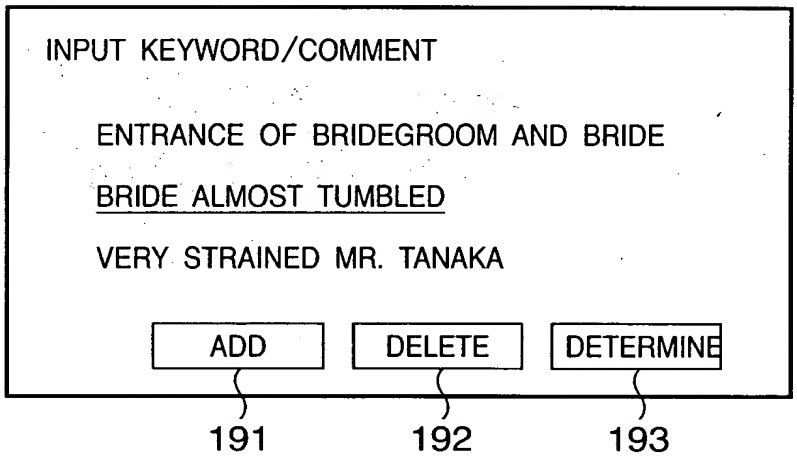
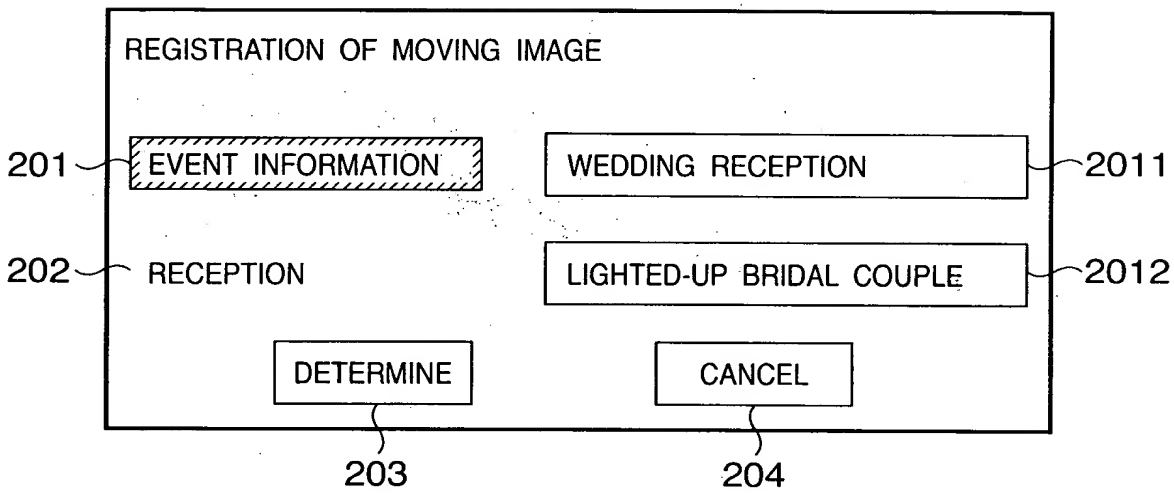

INPUT KEYWORD/COMMENT
ENTRANCE OF BRIDEGROOM AND BRIDE
BRIDE ALMOST TUMBLED
VERY STRAINED MR. TANAKA
ADD
DELETE
DETERMINE
191
192
193

FIG. 20


REGISTRATION OF MOVING IMAGE
201
EVENT INFORMATION
WEDDING RECEPTION
2011
202
RECEPTION
LIGHTED-UP BRIDAL COUPLE
2012
DETERMINE
CANCEL
203
204